

ABSTRACT

The present invention discloses aminothiols compounds and ~~acylated derivatives thereof~~ which respectively have general formula I and ~~formula II~~ wherein ~~R¹-R⁵~~ ~~R¹-R⁵~~ are substitutable ligands. Such compounds can perform as superior catalysts in asymmetric addition reactions of organic zinc and aldehyde. According to the present invention, the compounds is needed only less than 0.02% of main reactants to obtain enantioselectivity higher than 99% enantiomeric excess, whereby the asymmetric reactions can become very economic.

